Moore insists much on the perpetual energy-changes of these colloidal aggregates. But there is some obscurity in his account of them. While he speaks of the large amounts of energy set free in the process of colloidal aggregation, he nevertheless tells us that much energy is required and is rendered latent in chemical form in the building up of colloidal aggregates; energy which in the main is derived from sunlight by the ^action of chlorophyll, which in itself is a very complicated colloid. This colloid, when separated from the living cell, has only very slight synthetic power, even in sunlight. * But when the cell colloid, and chlorophyll, and the inorganic constituents to be acted upon are built up into one chemical whole, and then the sunlight plays upon this complex colloid, molecular vibrations and energy exchanges are initiated which cause up-building of organic matter and transformations from one organic substance to another. . . . A molecule of carbohydrate, or fat, or protein, can only form an integral part of living matter, or yield energy to living matter, after it has been assimilated into the colloidal mechanism of the cell and chemically constructed into the mass.'

After thus describing this synthetic process effected by the chlorophyll colloidal aggregates in the living cell—a process on which all other living things (save possibly some very lowly ones) depend for their supplies of food and energy—and after insisting on its uniqueness and the essential role in it of sunlight, as the supplier of active energy which is converted into latent

chemical energy, Moore proceeds to formulate what he calls the *Law of Complexity,* to the effect that * matter, so far as its energy environment will permit, tends to assume more and more complex forms in labile equilibrium '.